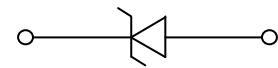


## Features

- 270W peak pulse power ( $t_p = 8/20\mu s$ )
- SOD-523 package
- Fast response time, typically < 1ns
- Excellent clamping voltage
- Low leakage current
- IEC 61000-4-2 ±30kV (Air) ESD protection
- IEC 61000-4-2 ±30kV (Contact) ESD protection
- IEC 61000-4-5 15A (8/20us) Surge protection
- IEC 61000-4-4 40A (5/50ns) EFT protection
- RoHS compliant



**SOD-523**



**Schematic Diagram**

## Applications

- Cellular phones
- Portable devices
- Digital cameras
- Power supplies

## Absolute Maximum Ratings

( $T_A = 25^\circ C$  unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_P = 8/20\mu s$ )	$P_{PP}$	270	W
Peak Pulse Current ( $T_P = 8/20\mu s$ )	$I_{PP}$	15	A
Operating Temperature	$T_J$	-55 to 150	°C
Storage Temperature	$T_{STG}$	-55 to 150	°C

## Electrical Characteristics

( $T_A = 25^\circ C$  unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1mA$	6.0	-	-	V
Reverse Leakage Current	$I_R$	$V_R = 5V$	-	-	0.5	$\mu A$
Clamping Voltage	$V_C$	$I_{PP} = 15A, T_P = 8/20\mu s$	-	12	18	V
Junction Capacitance	$C_J$	$V_R = 0V, f = 1MHz$	-	80	-	pF

## Typical Characteristic Curves

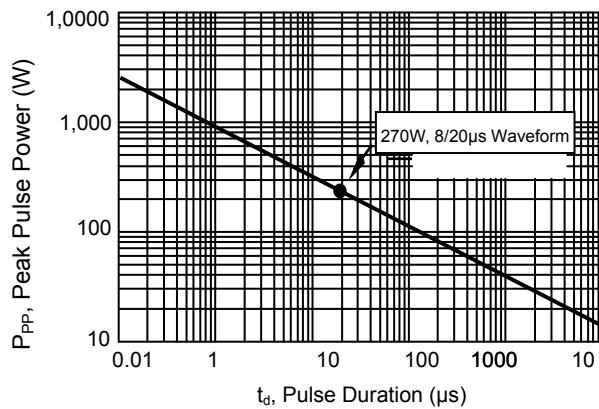


Figure 1. Peak Pulse Power vs. Pulse Time

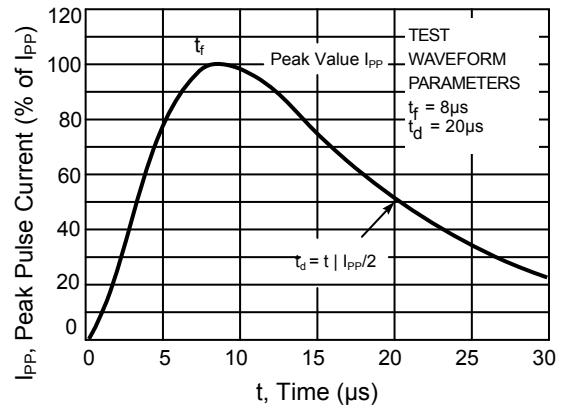


Figure 2. Pulse Wave Form (8/20μs)

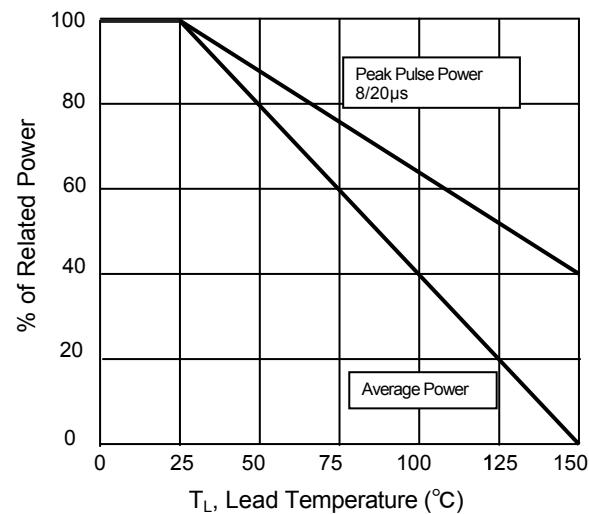


Figure 3. Power Derating Curve

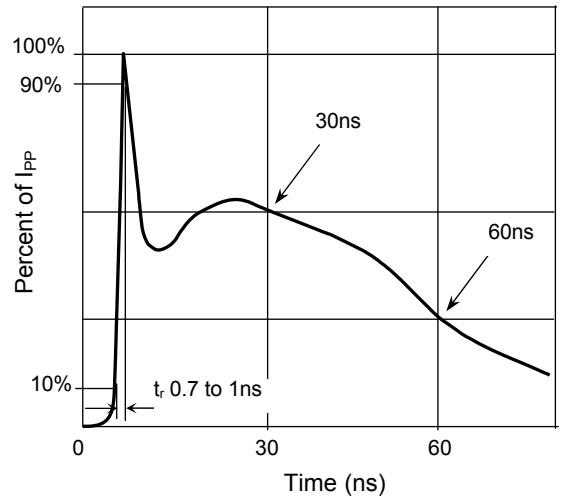
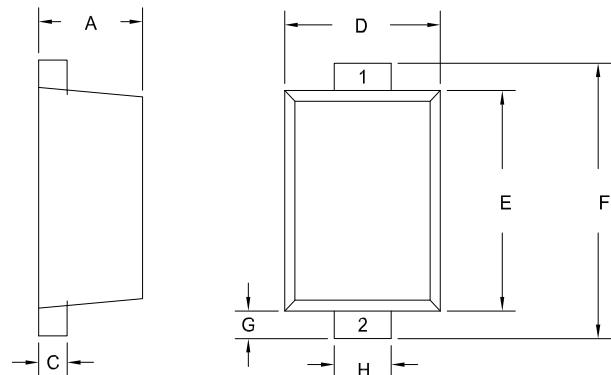


Figure 4. Pulse Waveform-ESD (IEC61000-4-2)

### Package Outline Dimensions (SOD-523)



Symbol	Dimension in Millimeters	
	Min	Max
A	0.50	0.70
C	0.07	0.20
D	0.70	0.90
E	1.10	1.30
F	1.50	1.70
G	0.15	0.25
H	0.25	0.35

### Order Information

MPN	Package	Marking	Carrier	Quantity	HSF Status
GSEV5U800	SOD-523	5H	Tape & Reel	3,000pcs / Reel	RoHS compliant